

A Two-Sided Estimate of the Solution of a Linear
Functional Equation

SOV/20-127-1-B/65

ASSOCIATION: Kazanskiy gosudarstvennyy universitet imeni V.I.Ul'yanova-
Lenina (Kazan' State University imeni V.I. Ul'yanov-Lenin)

PRESENTED: March 14, 1959, by S.L. Sobolev, Academician

SUBMITTED: March 11, 1959

Card 3/3

SLUGIN, S.N.

Method for the exchange of a linear equation in an abstract normalized
space. Izv. vys. ucheb. zav.; mat. no. 3:235-240 '60.
(MIRA 13:12)

1. Kazanskiy gosudarstvennyy universitet imeni V.I. Ul'yanova-Lenina.

(Functional analysis)

16.5400

80075
S/020/60/131/06/009/071AUTHOR: Slugin, S. N.TITLE: Linear Semiordered Topological Spaces 16

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1261-1263

TEXT: Let X be a linear structure (Ref.3) and a linear topological space (Ref.4) with basis of neighborhoods G of θ ; let $\lambda G \subset G$ for $|\lambda| \leq 1$. G is called monotone, if from $|x| \leq |y|$, $y \in G$ it follows $x \in G$. If every neighborhood is monotone, then the basis is called monotone. Definition 2: A linear structure which is a linear topological space with a monotone basis is called a linear semiordered topological space (KT-space). Let denote $\sup\{x, y\} = x \vee y$, $\inf\{x, y\} = x \wedge y$. Definition 3: A subset K of the linear structure X which consists of elements $x > \theta$ is called open positive, if K with an arbitrary pair of elements u, v also contains $u \wedge v$ and $\frac{1}{n}u$ (n natural number).

Theorem 1: If an open positive subset K exists in the K -space X and if G is defined by the inequality $|x| < u \in K$, then X is transformed into a KT-space. Here from the topological convergence it follows the (0)-convergence (Ref.1). If from the relations $x_n > x_m, \inf\{x_n\} = \theta$ it follows $x_n < u$ for $n = n(u)$, then from the (0)-convergence it

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Linear Semiordered Topological Spaces

follows the topological convergence of a (countable) sequence.

Theorem 2: In the KT-space 1.) all majorizable sequences are convergent, 2.) the absolute value, upper and lower bounds and inequalities are continuous, 3.) the intermediate variable has a limit value, 4.) the monotone variable is comparable with the limit, i.e. from $x_n \rightarrow x$, $y_n \rightarrow y$ it follows: 1.) from $|z_n| \leq |x_n|$, $x = 0$ it follows $z_n \rightarrow 0$; 2.) $|x_n| \rightarrow x$, $x_n \vee y_n \rightarrow x \vee y$ from $x_n \leq y_n$ it follows $x \leq y$; 3.) from $x_n \leq z_n \leq y_n$, $x = y$ it follows $z_n \rightarrow x$; 4.) from $x > x_{n+1}$ it follows $x_n > x$.

The author shows that in KT-spaces the theorem 4 of (Ref.5) and the results of § 2 of (Ref.6) (two-sided estimations of the solution of non-linear functional equations) remain valid. The majorant method of (Ref.1) can be improved in KT-spaces.

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S/020/60/131/06/009/071

Linear Semiordered Topological Spaces

There are 7 Soviet references.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet imeni V. J.
Ul'janova-Lenina (Kazan' State University imeni
V. J. Ul'janov-Lenin)

PRESENTED: December 22, 1959, by S. L. Sobolev, Academician

✓

SUBMITTED: December 22, 1959

Card 3/3

SLUGIN, S.N.

Partially ordered topological groups. Dokl.AN SSSR 136 no.1:36-
38 Ja '61. (MIRA 14:5)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ulyanova-Lenina.
Predstavлено академиком S.L.Sobolevym.
(Topology)

SLUGIN, S.N.

Moduli over K-space. Dokl. AN SSSR 139 no.5:1059-1062 Ag '61.
(MIRA 14:6)

1. Gor'kovskiy gosudarstvennyy universitet im. N.I.
Lobachevskogo. Predstavлено akademikom S.L. Sobolevym.
(Spaces, Generalized)
(Functional analysis)

SILGIN, S.N.

Monotone processes of bilateral approximations in a partially
ordered convergence group. Dokl. AN SSSR 167 №.1:34-37
(MIRA 15:11)
N '62.

1. Gor'kovskiy gosudarstvennyy universitet im.
N.I. Lobachevskogo. Predstavлено akademikom S.L. Sobolevym.
(Approximate computation)
(Groups, Theory of)

SLUGIN, S.N.

A complex semiordered space and moduli over it.
Dokl. AN SSSR 147 no.2:306-309 N '62. (MIRA 15:11)

1. Gor'kovskiy gosudarstvennyy universitet im.
N.I. Lobachevskogo. Predstavleno akademikom S.L. Sobolevym.
(Spaces, Generalized)

SLUGIN, S.N.

Use of the steepest descent method in a Hilbert modulus over a
finite-dimensional complex K-space. Dokl. AN SSSR 152 no.4:
834-837 O '63. (MIRA 16:11)

1. Gor'kovskiy gosudarstvennyy universitet im. N.I. Lobachevskogo.
Predstavлено академиком S.L. Sobolevym.

SINGEN, S.N.

(Soviet)

Certain partially ordered objects in the theory of approximation methods. Izv. vuz. mat. no. 6 1963
mat. no. 6 1963; mat. no. 6 1963
(MIRA 17:8)

SLUGIN, S.N.; SHASHKOV, V.M.

Combination of some variational methods in a Hilbert modulus
over a series of vector spaces. Uch. zap. Kaz. un. 124 no.6:
284-292 '64. (MIRA 18:9)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410013-9

SLUGIN, S.N.

Complex Hilbert structure. Izv. AN SSSR. Ser. mat. 29 no.1:215-226
(MIR 18:4)
1965.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410013-9"

SHISHKOV, V.P., dotsent; BABAK, I.M., aspirant; SOLOV'YEV, F.A., dotsent;
DANILEVSKIY, V.M., dotsent; VISHNYAKOV, S.I., dotsent;
TITOV, G.I.; OKUNTSOV, L.P.; AFANAS'YEV, V.P.; ZHAROV, A.V.,
assistant; SLUGIN, V.S.; KRYLOV, O.N., aspirant

Noninfectious diseases. Veterinariia 41 no.4:64-80 Ap '64.
(MIRA 17:0)

1. Moskovskaya veterinarnaya akademiya (for Shishkov, Zharov).
2. Belotserkovskiy sel'skokhozyaystvennyy institut (for Babak).
3. Velikolukskiy sel'skokhozyaystvennyy institut (for Vishnyakov).
4. Kurskiy sel'skokhozyaystvennyy institut (for Afanas'yev).
5. Zavedyushchiy otdelom nezaraaznykh zabolovanii Buryatianskoy nauchno-pracivodstvennoy veterinarnoy laboratorii (for Titov).
6. Zavedyushchiy Berezovskoy veterinarnoy laboratoriyye, Volgogradskaya obl. (for Okuntsov). 7. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Kraynego Severa (for Afanas'yev).
8. Pushkinskiy zverosovkhoz Moskovskoy oblasti (for Slugin).
- 9 Leningradskiy veterinarnyy institut (for Krylov).

CARD: 1/2

M-6

COUNTRY : USSR

CATEGORY :

ABS. JOUR. : RZBiol., No. 19, 1958, No. 87092

AUTHOR : Slugina, A. F.

INST. : Chkalov Scientific Research Institute of Mineral Fertilizers for Perennial Grasses

TITLE :

ORIG. PUB. : Tr. Chkalovskiy n.-i. in-t molochno-myasn. skotovodstva, 1956, No 10, 163-171

ABSTRACT : Trial plantings with application of fertilizer, of alfalfa, thickspike wheatgrass, and fescue, have shown that the effect of fertilizers was more pronounced on aftermath yields than on the primary grass stand. The best effect upon alfalfa yield was produced by phosphorus fertilizers (130% dry weight in comparison with controls). Highest increase of wheatgrass was obtained on application of nitrogen fertilizers. The effect of fertilizers is increased on increase of the number of harvests. Concurrently with increasing yields of above-ground portions of the plants, application of fertilizers increases average weight of roots, and shoot formation. Field trials have fully

CARD: 1/2

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Country : USSR

CATEGORY :

ABS. JOUR. : RZBiol., No. 19, 1958, No. 87092

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : confirmed the results of the experimental plantings. For blue alfalfa the most effective is an autumn application of phosphorus fertilizers (35 kg of active ingredient), and 25 kg before the growing of spring aftermath. For thickspike wheatgrass the most effective is a three-increment application of nitrogen fertilizers together with phosphorus fertilizers: during late autumn, before growth of spring aftermath, and before growth of autumn aftermath (each at a rate of 20 kg/hectare of active ingredient). -- N. I. Grib.

CARD: 2/2

BAYKINA, V.M. [deceased]; MAMYRE, S.N. [deceased]; KUDRYAVTSEVA, T.N.; CHIKHALYA,
Z.P.; SLUGINA, M.B., DZEGILENKO, N.B.

Comparative study of neomycin, colimycin and mycarin by the counter-current distribution method. Antibiotiki 8 no.12:1059-1064 D 163.
(MIRA 17/18;
1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

LIBINSON, G.S.; MUGINA, M.D.

Equilibrium sorption of vancomycin A by cation exchangers.
Zhur. khim. 39 no.11:2813-2815 N 1965.

(MIR 18:12)

Izvestiyia nauchno-issledovatel'skogo Instituta antibiotikov.

NOV. , . . , A.M., E.P.

Preparation of polymerizable organosilicon oligomers, diethoxymethylacrylate polyalkyl-(alkylaryl)-siloxanes. Plast. massy no. 8:21-22 '65. (MIRA 18:9)

SLUGINA, Z.P.; VOZNESENSKAYA, Ye.V.; VASIL'YEVA, N.I.

Using methyl isobutyl ketone for removing paraffin from oil
fractions. Khim. i tekhn. topl. i masel no.1:42-49 Ja '57.
(MLRA 10:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Neftyanoy
promyshlennosti.
(Paraffins) (Pentanone) (Lubrication and lubricants)

IVANOV, V.S., inzh.; SLUGINA, Z.P., inzh., red.; VOZNESEN'SKAYA, Ye.V.,
inzh., red.; BRONSHTEYN, I.I., red.; BOJUNOV, N.I., tekhn.red.

[Stabilization and reclamation of oils used in power generating
machinery] Stabilizatsiya i vosstanovlenie energeticheskikh
masel. Moskva, Gos.energ.izd-vo, 1958. 26 p. (MIRA 12:2)

1. ORGRES, Trust, Moscow.
(Oil reclamation)

VOZNESENSKAYA, Ye.V.; SUGINA, Z.P.; KUTUKOVA, V.I.; YAKOB, F.S.;
SHAKHSUVAROVA, G.V.; VASIL'YEVA, N.I.; CHYAZHOV, B.V.; ROZENSTEYN,
M.Z.

Production of low pour-point oils from eastern paraffin-base
crudes by means of dewaxing with the aid of selective solvents.
Trudy VNII NP no.7:69-78 '58. (MIRA 12:10)
(Petroleum--Refining) (Lubrication and lubricants)

VASIL'YEVA, N.I.; VOZNESEN'SKAYA, Ye.V.; SLUGINA, Z.P.

Rapid method for determining the potential oil content of refined oil fractions. Trudy VNII NP no.7:276-282 '58.
(MIRA 12:10)
(Petroleum products)

SLUGINA, Z.P.; VOZNESENKAYA, Ye.V.; VASIL'YEVA, N.I.

Study of the low-temperature crystallization of solid hydrocarbons from solutions depending on the conditions of cooling.
Trudy VNII NP no.7:328-339 '58. (MIRA 12:10)
(Hydrocarbons) (Crystallization)

27-4-6/25

AUTHOR: Sluginov, G., Instructor of the Buryat-Mongol Oblast' Committee
of the USSR Communist Party

TITLE: The Party's Oblast' Committee Helps Out (Obkom partii pomogayet)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1958, # 4, p 13
(USSR)

ABSTRACT: The republic contains 14 labor reserve educational institutions with some 3,000 pupils. The local communist party has studied the causes of the lack of adequate education and has come to the conclusion that the pedagogic collectives work badly, largely because teachers and foremen take no pains in preparing their lessons and do not have enough graphic material.

There are enough good teachers and foremen but their work is unorganized, incomplete, undisciplined.

ASSOCIATION: Buryat-Mongol'skiy oblastnoy komitet KPSS (Buryat-Mongol Oblast Committee of CP USSR)

AVAILABLE: Library of Congress
Card 1/1

AUTHOR: Sukharev, I., Instructor SOV, Minsk, 1978

TITLE: Professional Schools Are Few at New Tasks (Professional schools
are unlikely to be novelties and such will)

PERIODICAL: Prefer Long-time-teaching-the-way-strengthening, 1978, No. 1,
pp. 1-4. (PSK)

ABSTRACT: The author criticizes the practice of the educational institutions in
the choice of the PSK KPSH and USSR Council of Ministers "to
intensify the Tie Between School and Reality and in the
Development of the System of National Education" which aims
to eliminate the basic shortcomings of school training. The
training will be divided into 2 stages, the first of which
affords education up to the 5th grade, while the second stage
will link education with productive labor. The extensive
system of training in labor reserves a teacher his freedom in his
field itself. It has supplied the national economy with hundreds
of thousands of young qualified workers yearly. In the
school year 1977/78, the schools of the Kurapat AGP trained
out 1,650 young specialists. The author believes that the choice
of the 17 institutions as schools educating fully qualified
experts in agriculture to establish the new hypermodern
agriculture is most feasible.

... Are Facing New Tasks

GOV/27-38-1-4/15

school with 2 to 3 years of training; the village professional technical school with 1 to 2 years training. He mentions the necessity of introducing certain changes in the organization and methods of training, and points out the lack of coordination prevailing at present between the theoretical instruction of the teachers and the practical training, conducted by the foremen. He also makes suggestions for placing education on a more economic foundation.

ASSOCIATION: Buryatskij obkom KPSS (The Buryat Obkom KPSS)

Card 2/2

. MUSCHI, Jozef, mgr inz.

Planetary gear for conveyer driving. Rudy i metale 9
no.10:571-574 0 '64.

SLUKA, A.Ye.

Principal features of the geography of population migrations in France.
Vop.geog. vol.29:225-246 '52. (MILB 6:7)
(France--Migration, Internal) (Migration, Internal--France)

BUKIN, A. Yu.

Defended his Candidate's dissertation in the Geography Faculty of Moscow State University on 3 July 1952.

Dissertation: "The Geography of the Migrations of Population in France in Connection With the Depopulation of Villages."

SO: Vestnik Moskovskogo Universiteta, Seriya Fiziko-Matematicheskikh i Sotsial'nykh Nauk, No. 1, Moscow, Feb 1953, pp 151-157; transl. in W-19732, 12 April 54, For off. use only.

SLUKA, A.Ye.

The Saar industrial region. Geog. v shkole. no.2:27-29 Mr-Ap '53.
(MLRA 6:5)
(Saar Valley--Industries)

ALEXANDROVSKAYA, N.V.; RYABCHIKOV, A.M.; SLUKA, A.Ye.

Results of admission examinations in geography at Moscow University.
Geog. v shkole 18 no. 5:29-31 D-0 '55. (MIRA 8:12)
(Geography--Study and teaching.)

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CIA-RDP86-00513R001651410013-9

SLUKA, A. Ye.

~~Industry of France. Geog. v shkole 18 no.6:19-27 E-D '55.
(France--Industries) (MLRA 9:1)~~

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410013-9"

SLUKA, A.Ye.

Paris as a center of attraction for population. Vop. ~~geog.~~
no. 38:177-195 '56. (MLRA 9:9)

(Paris--Population)

SLUKA, A.Ye.; YASHCHENKO, G.I.; TIKHOMIROV, V.P., otvetstvennyy red.;
CHIZHOV, N.N., red.; NOGINA, E.I., tekhn.red.; GOLITSYN, A.V., red.kart.

[France, Belgium, Netherlands, Luxemburg, Monaco] Frantsiya,
Bel'gija, Niderlandy, Liuksemburg, Monako. Moskva, Gos.izd-vo
geogr.lit-ry, 1957. 31 p. (MIRA 10:12)
(Europe, Western--Geography)

SLUKA, A.; LOBZOVA, N.A., red.; CHIZHOV, N.N., red.

[Belgium] Bel'gija. Scale 1:500000. Moskva, Gos.izd-vo geogr.
lit-ry, 1959. col.map fold. [Belgium] Bel'gija. 25 p.
(MIRA 13:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii.

(Belgium--Maps)

YEVTEYEV, C.A.; SLUKA, A.Ye.

Second edition of the French National Atlas in a new stage in the development of the French geography and cartography. Izv. AN SSSR. Ser. geog. no. 4:140-143 Jl-Ag '61. (MIRA 14:7)
(France--Maps)

SLUKA, A.Ye.

New administrative and economic division of France. Vop. geog.
no. 53:126-130 '61. (MIRA 14:7)
(France--Administrative and political divisions)
(France--Economic zoning)

SLUKA, A.Ye.

Geography at the Sorbonne. Vest.Mosk.un.Ser.5: Geog. 17
no.3:57-62 My-Je '62. (MFA 15.2)

1. Kafedra ekonomiceskoy i politicheskoy geografii kapitalisticheskikh i slaborazvitykh stran Moskovskogo universiteta.
(Paris—Geography—Study and teaching)

SIKSI, Tatyana

Georgijevskij - Leningrad University. Vsesjuz. zhurn. po zemlevedeniju
(MIRA 17:10)
L. M. Markovskij - Leningrad University. geograficheskiy
fakultet.

SLUKA, FRANTIŠEK

JIROVEC, Otto, prof. Dr; SLUKA, František, MUDr; SVOBODA, Adolf, MUDr;
VALIHRACH, Jan, MUDr; VOJTOVÁ, Helena, MUDr

Tularemia in Jihlava and Valtice regions in 1945-1952. I. Intra-cutaneous tests with tularin. Česk. hyg. epidem. mikrob. 2 no.3:
328-336 June '53.

1. Parasitologicky učebny Karlovy univerzity v Praze (for Jirovec)
2. Státní okresní nemocnice ve Valticích, (for Sluka) 3. Krajská
hyg. epidem. stanice v Brně. (for Svboda) 4. Krajská hyg. epidem.
stanice v Uherském Hradišti. (for Valihrach) 5. Krajská hyg. epidem.
stanice v Jihlavě. (for Vojtová)
(TULAREMIA, epidemiology,
Czech.)

HARDOS, V.; SLUKA, Fr.

Acute human infections caused by Tahyna virus. Cas. lek. cesk. 102
no.15:394-402 12 Ap '63.

1. Ustav epidemiologie a mikrobiologie v Bratislave a Interne oddelenie,
nemocnice vo Valticiach, OUNZ Breclav.
(VIRUS DISEASES) (TACHYCARDIA) (LEUKOCYTOSIS)
(BLOOD SEDIMENTATION) (NEUTRALIZATION TESTS)
(HEMAGGLUTINATION INHIBITION TESTS) (LUNG) (DIAGNOSIS)
(THORACIC RADIOGRAPHY)

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and
Their Application, Part 3. - Fermentation Industry.

H-26

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 23018

Author : Josef Sluka

Inst :
Title : Existing and Planned Shops for Washing, Filling and
Plugging Bottles.

Orig Pub : Prumysl potravin, 1957, 8, No 8, 431-433

Abstract : Description of individual aggregates and general evalua-
tion of mechanized workshops.

Card 1/1

P. BRALÍČEK, V.; LÍTKOVÁ, J.; BYŠIČKA, V.

Antitubercular drugs. XIV. Isonicotinoylhydrazones of some
phenylglyoxylic acids. Česk. farm. 13 no. 7:345-349 S 162.

I. Výzkumný ústav pro farmacii a biochemii, Praha.

BUDÉSINSKY, Z.; PERINA, Z.; SLUKA, J.

5-Arylpyrimidines. I. 5-Aryl-2-thiocytosines and 5-arylcytosines.
Cesk. farm. 11 no.7:345-354 S '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(CYTOSINE)

SLUKA, K.

Projecting plants for the manufacture of furniture. p. 35

CZECHOSLOVAK HEAVY INDUSTRY. (Ceskoslovenska obchodni komora) Prague,
Czechoslovakia. Nov. 3, 1959

Monthly List of East European Accessions (EFAI), LC, Vol. 8, No. 7, July 1959
Uncl.

SLUKHAY, I., polkovnik

Sense of party duty. Komm Vooruzh. 511 46 no.6:23-27
(MIRA 18:11)
Mr '65.

SLUKHAY, Ivan Andreyevich, polkovnik; SOKOLOV, V.P., podpolkovnik,
red.

[Rockets and traditions] Rakety i traditsii. Moskva,
Voenizdat, 1965. 223 p. (NIKA 18:7)

Influence of dressing on the development of the root system of the sugar beet. S. I. Shukla. Chemistice Nauk 1960, 11, 101-105. Nitrogenous fertilizer produces an increase in the no. of lateral roots of the sugar beet, especially at a depth of 10-20 cm. At greater depths (30 cm. and over) there was no such effect. At the same time, there was noted an increase in crop yield. A. Papineau-Couture.

ASR SLA METALLURGICAL LITERATURE CLASSIFICATION

0306 030679
0306 030679

SLUKHAY, S. I.

Zaranyovskiy, A.I. and Slukhay, S. "On the problem of determining the resistance of soil to erosion", Trudy Zhitomirsk, S. kh. In-ta, Vol. 111, 1949, p. 97-100.

SO: U-430, 16 Sept. 53, (Letopis Uchurnal 'nykh Statey, No. 23, 1949).

The influence of potassium permanganate on germination and initial growth of some tree species. S. I. Stukhal and V. N. Kostomarov. *Dopovid' Akad. Nauk Ukr. R.S.R.* 1952, 289-93 (Russian summary, 203-4).—The seeds were soaked 15 min. in $KMnO_4$ soln. 1-10 mg./l. The optimal concn., 5 mg./l., produced the following changes in germination per cent and initial growth in 14 days (by wt.): seeds of Siberian larch stored 1.5 year, increase of 49-68%; increase of 20%; fresh seeds of Siberian acacia increase of 82-85%, increase of 33%; by 1-year-old seeds of Siberian acacia increase of 31-63%, increase of 22%; seeds of silver maple —, increase of 73%.
A. Semenov

M
D 11

Inst. Forestry, Acad. Sci Ukr SSR

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Serial List of Russian Acquisitions, Library of Congress
June 1963. HCL.

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The influence of some conditions of growth on the content of tannins and dry substances in the leaves of smoke tree (*Rhus cotinus*). S. I. Stukhal and I. I. Mikhеeva. Dopovid Akad. Nauk Ukr. R.S.R. 1953, 551-4 (Russian)

summary, 554-5).—The content of tannins and dry substances in the leaves of *R. cotinus* varies depending on the illumination, part of the plant and time of the year, being highest in the upper third of the plant exposed to sunlight. R. Dowhenko

Inst. Forestry, Acad. Sci Ukr SSR.

SLUKHAY, S.I.

USSR/Forestry - Forest Plants.

K-5

Abs Jour : Ref Zhur - Biol., No 2, 1958, 5905

Author : Slukhay, S.I.

Inst : Institute of Forestry, Academy of Sciences UkrSSR

Title : The Influence of Manganese and Boron on the Germination
and Growth of Young Forest Plants.

Orig Pub : Sb. Mikroelementy v s.-kh i meditsine, Riga, Akad Nauk
LatvSSR, 1956, 455-463

Abstract : When seeds of the yellow acacia, white mulberry, and common pine, all possessing lower than average germinability, were soaked for 12 hours before sowing in a solution of KMnO₄ (5-10 mg/liter of water), germination was increased 20-33%. There was a simultaneous increase in the seeds' growing energy, and seedlings were bigger (in terms of dry matter). In vegetation experiments on podzolized

Card 1/2

COUNTRY : USSR
 CATEGORY : Forestry, Forest Cultivation.

AUTHOR : RZhBiol., No. 14 1959, No. 63230

EDITION : Plutkay, S. I.
 TITLE : "Ukrainian Scientific-Research Institute of Forest Improvement of the Nutrition Conditions for Love Velvet Seeds Under Fertilizer".

ORIG. PUB. : Ukr. nauch.-tekhn. inform. Ser. n.-i. Izd. lese. "Leva i agronomika", 1957, No. 3-4, 37-42

ABSTRACT : It is established by first observations in forest series that love velvet seedlings require fertile light soils with sufficient moisture. The cited experiments for studying the influence of fertilizer on the growth of the seedlings were performed on soils of average and light loamy composition in the western part of the forest-steppe (Ukrainian SSR). At the Fastov State Forest Nursery and at the Golosayevskaya Experimental Base (near Kiev), basic and ordinary fertilizers were tested, both applied with the seeds in the

TABLE: Measurement and Agricultural and Forest Amelioration

NOTE: "Love velvet" or "velvet tree" is the Russian name of Stellaria media.

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ABS. JOUR. : RZhBiol., No. 14 1959, No. 63230

AUTHOR :
 ISRT. :
 LIT. :

ORIG. PUB. :

ABSTRACT : In soil trenches it has been observed that relatively little nutritive material was sufficient. It is found that good results are attained with application of 150 kg/ha of P_2O_5 ; the effect increases with the addition to the P_2O_5 of 10 centners/hectare of manure-rich manure; further increase of the rates of fertilization is almost not reflected in the results. The application of NH_4NO_3 or its addition to P_2O_5 extended the vegetative period, a result which had a negative effect on the formation and winter resistance of the plant. Most effective was the use of basic fertilizers, with 200 kg/ha of manure + P_2O_5 in the amount of 500 kg/hectare.

Card: /

SLUKHAY, S.I.

Effect of mineral fertilizers on the growth of poplar roots
at an early age. Dop. AN URSR no.3:410-413 '62. (MIRA 15:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii
rasteniy. Predstavлено академиком АН СССР П.А. Власюком.
(Fertilizers and manures) (Poplar)

SLIUKHAT, Stepan Ivanovich; VLASYUK, I.A., akademik, oboz. red.,
KULNETSOVA, A.N., red.

[Nutrition and fertilization of young woody plants] Bi-
tanje i udobrenie molodykh drevesnykh rastenii. Kiev,
Naukova dumka, 1965. 300 p. (MIRA 18.7)

1. AN Ukr.SSR i Vsesoyuznaya akademiya sel'skokho-
zyaistvennykh nauk imeni V.I.Lenina (fer Vlasyuk).

SLULKAY, Tat'yana Dmitriyevna; YUL'KA, Nikolay Fedorovich;
DEBKOV, Ye., red.

[Centralization of the accounting in public institutions]
Tsentralizatsiya ucheta v bluzhetnykh uchrezhdeniakh.
Moskva, Izd-vo "Finansy," 1964. 102 p. (MIR. 17:8)

SLUKHAY, V.V.

Materials on the parasitic Protozoa of fishes in the northern
Donets basin. Dop. AN URSR no.3:408-411 '64.
(MIRA 17:5)
I. Khar'kovskiy meditsinskiy institut. Predstavлено akademi-
kom AN UkrSSR A.P. Markevichem [Markevych, O.P.].

SLUKHAY-NATAL'CHENKO, A.Ye.

Effect of freshly isolated Azotobacter strains on the crop yield.
Trudy Vses. inst. sel'khoz. mikrobiol. no.14:236-241 '58.
(MIRA 15:4)
(Azotobacter) (Crop yields)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410013-9

SLUKHAYEV, V.V.

Affine symmetrical vector fields. Sib. mat. zhur. 6 no.4:924-933
(MIRA 18:10)
Jl-Ag '65.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410013-9"

ACC NR: AP7008931

SOURCE CODE: UR/0199/66/007/C05/1115/1129

AUTHOR: Slukhayev, V. V.

ORG: none

TITLE: Dual field and cylindrical fluid flow

SOURCE: Sibirskiy matematicheskiy zhurnal, v. 7, no. 5, 1966, 1115-1129

TOPIC TAGS: fluid flow, geometry

SUB CODE: 20,12

ABSTRACT: The article studies the equiaffine geometry of dual field, which is defined as a field consisting of a pair of reciprocal vectors given at each point of a three-dimensional space. The author considers one particular class of three-dimensional fluid flow: viz., cylindrical flow, in which covariant vector V is most naturally associated with contravariant velocity vector v . The author notes that all existence theorems in the article are proved by employing a theorem of V. V. Vasenin. Orig. art. has: 56 formulas. [JPRS:
40303]

UDCI: 513.73

0019 1021

Card 1/1

SLUKHOTSKIY, A. YE.

Author:

Specifying the frequency for the surface tempering of parts by the induction method,
and applying it in the auto and tractor industry. Avt.traekt. zh., no. 1, 1952.

REPRODUCED FROM THE ORIGINAL DOCUMENTS, LIBRARY OF C.I.A. WASH. D.C. 1952. C.I.A. FILM.

SLUKHOTSKIY, A.Ye.

Application of ionic converters in feeding induction heating installations. [Izdatelstvo] LOMITOMASH no.30:99-110 '52. (MLRA 8:1)
(Electric current converters)

SLUKHOTSKIY, A. Ye.

Selection of current frequency for induction heating. [Izdatelstvo]
LONITOMASH no. 30:197-212 '52. (MLRA 8:1)
(Induction heating)

8(5)

PHASE I BOOK EXPLOITATION

SOV/1322

Slukhotskiy, A.Ye.

Zakalochnyye induktory (Induction Heaters for Hardening) Moscow, Mashgiz, 1954.
46 p. (Series: Bibliotekha vysokochastotnika-termista, vyp. 6) 5,000 copies
printed.

Reviewer: Vasil'yev, A.S., Candidate of Technical Sciences; Ed.: Fogel', A.A.,
Candidate of Technical Sciences; Tech. Ed.: Sokolova, L.V.; Managing Ed.
for Literature on the Design and Operation of Machines (Leningrad Division,
Mashgiz); Fetisov, F.I., Engineer.

PURPOSE: The booklet is intended for readers interested in the applications
of induction heating.

COVERAGE: The booklet gives a concise and simplified description of design
principles of basic types of induction heaters for high-frequency surface
hardening of steel details. The author explains approximate methods of
calculating the parameters of induction heaters, based chiefly on the use of
graphs. This method of approximate calculation was checked in practice at the
Card 1/3

Induction Heaters for Hardening (Cont.)

SOV/1322

Nauchno-issledovatel'skiy institut tokov vysokoy chastoty imeni professora V.P. Vologdina (Scientific-Research Institute of High-frequency Currents). There are 7 Soviet references appearing in footnotes.

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Card 2/3

SLUKHOTSKIY, A.Ye.; RYSKIN, S.Ye.; SHEPELYAKOVSKIY, K.Z., kandidat
tekhnicheskikh nauk, rezensent; GOLOVIN, G.P., kandidat tekhnicheskikh nauk, redaktor; PETERSON, M.M., tekhnicheskiy redaktor

[Inductors for induction heating of machine construction parts;
planning and manufacture] Induktory dlia induktsionnogo nagreva
mashinostroitel'nykh detalei; proektirovanie i izgotovlenie. Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954.
319 p.

(MLRA 7:11)

(Induction heating) (Machinery industry)

DONSKOI, A.V., doktor tekhnicheskikh nauk.

Inductors for induction heating of machine parts. A.E.Slukhotskii,
S.B.Ryskin, reviewed by A.V.Donskoi. Vest.mash. 35 no.10:88 0
'55. (MIRA 9:1)
(Induction heating)(Steel--Heat treatment)

YEVANGULOVA, Yevgeniya Pavlovna; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SMIKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; MIKHAYLOV-MIKHEYEV, P.B., doktor tekhnicheskikh nauk, rezensent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Quality control of surface hardening] Kontrol' kachestva po-verkhnostnoi sakalki, Izd. 2-ee, ispr. i dop. Pod.red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit.-ny, 1957. 33 p. (Biblioteka vysokochastotnika-termista, no5)

(MLRA 10:6)

(Metals--Hardening) (Quality control)

LYSKIN, Solomon Yefimovich; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.I., kandidat tekhnicheskikh nauk, redaktor; BAMYNNER, A.B., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHNEVA, O.V., tekhnicheskiy redaktor

[Hardening machines] Zakalochnye stanki. Izd. 2-e, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 46 p. (Bibliotekha vysokochastotnikov-termistov, no.11)

(Induction heating) (Metals--Hardening)

ZHEZHERIN, Rostislav Petrovich; SPITSYN, Mikhail Aleksandrovich, kandidat tekhnicheskikh nauk; POGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SLIUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; SIMONOVSKIY, M.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Power generators for high-frequency heating] Mashinnye generatory dlia vysokochastotnogo nagreva, Izd.2-e, ispr. i dop. Pod red. A.A. Pogelia, Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 49 p. (Bibliotekha vysokochastotnika-termista, no.8)

(MLRA 10:6)

(Induction heating) (Electric generators)

SHEKALOV, Aleksandr Alekseyevich; SHTREYS, Yakov Iosifovich; BLINOV, Boris Vladimirovich; DOKSKOY, A.V., professor, doktor tekhnicheskikh nauk, rezensent; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLEKHOTSKIY, A.I., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, I.P., kandidat tekhnicheskikh nauk, redaktor; BANUER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; SYCHEVA, O.V., tekhnicheskiy redaktor

[Smelting in small coreless induction furnaces] Plavka v malykh besserdchnikovykh oinduktsionnykh pechakh. Izd. 2-eo, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos. nauchno-tekhn. izd-vo mashino-stroit.lit-ry, 1957. 53 p. (Biblioteka vysokochastotnikiem-termistom, no.14) (MIRA 10:7)

(Electric furnaces)

SLUKHOTSKIY, Aleksandr Yakovlevich, kandidat tekhnicheskikh nauk; . FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; GLUZHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUMER, A.B., inzhener, redaktor; VASIL'YEVA, V.I., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, redaktor; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Inductors used in steel hardening] Zakalochnye induktory. Izd.2-ee, ispr. i dop. Pod. red.A.A.Fogelia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostreit.lit-ry, 1957. 54 p. (Bibliotekha vysokochastotnika-termista, no.6) (MLRA 10:6)

(Induction heating) (Steel--Hardening)

SHAMOV, Aleksandr Nikolayevich; FOGEL', A.A. kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.S., kandidat tekhnicheskikh nauk, redaktor; SMIKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BANUNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Current supply of high-frequency heating installations by power generators] Pitaniye vysokochastotnykh magrevatel'nykh ustroistv ot mashinnykh generatorov, Izd.2-ee, ispr. i dop. Ped red. A.A. Fogelia. Moskva, Gos.sauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 55 p. (Bibliotekha vysokochastotnika-termista, no.10)

(MLRA 10:6)

(Induction heating)

GLUKHANOV, Nikolay Parmenovich ; FOGEL', A.A., kandidat metkhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; GLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; BAMYNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Physical basis of high frequency heating] Fizicheskie osnovy vysokochastotnogo nagreva, Izd.2-e, ispr.1 dorp. Pod red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 58 p. (Biblioteka vysokochastotnika-termista, no.2) (MLRA 10:5)
(Induction heating)

BRITSYN, N.L.; DONSKOY, A.V., prof., doktor tekhn.nauk, retsenzent; FOGEL',
A.A., kand.tekhn.nauk, red.; SPITSYN, M.A., kand.tekhn.nauk, red.;
SLUCHOTSKIY, A.Ie., kand.tekhn.nauk, red.; GLUKHANOV, N.P., kand.
tekhn.nauk, red.; BAMUNER, A.V., inzh., red.; GOFMAN, Ye.K., red.
izd-va; SPERANSKAYA, O.V., tekhn.red.

[High-frequency electric field heat treatment] Magrev v elektriche-
skom pole vysokoi chastoty. Izd. 2-e, ispr. i dop. Pod red. A.A.
Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry,
1957. 62 p. (Bibliotekha vysokochastotnika-termista, no.15)
(Dielectric) (MIRA 11:2)
(Lumber--Drying)

VOLOGDIN, Vladislav Valentinovich; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BANIKER, A.V. inzhener, redaktor; SIMONOVSKIY, B.Z., redaktor izdatel'stva; KHOMO-SHAYLOV, V.G., kandidat tekhnicheskikh nauk, rezensent; SYCHEVA, O.V. tekhnicheskiy redaktor.

[Induktsion. solmring]. Palki pri.industsiionnom zarevye. Ind.2-ee,
izpr. i dep. Pod.red.A.A.Fogelia. Moskva, Gos.nauchno-tehn.izd-
ve mashinostroit.lit-ry, 1957. 66 p. (MLRA 10:6)
(Induction heating)(Solder and soldering)

BOGDANOV, Valentin Nikolayevich; FOGEL', A.A. kandidat tekhnicheskikh nauk, redaktor; SPITSYM, M.A., kandidat tekhnicheskikh nauk, re-redaktor; SLUCHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, re-daktor; GLUKHANOV, G.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; VASIL'YEVA, V.P., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Use of through induction heating in industry] Применение сквозного индукционного нагрева в промышленности. Izd.2-oe, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 78 p.(Bibliotekha vysokochastotnika-termista, no.12) (MLRA 10:6)

(Induction heating)
(Metals--Heat treatment)

1. UGGUBIN Vsevolod Valentinovich; SLUZHOT'KAY, Aleksandr Ivanovich; DOMOKUY, A.V., professor, doktor tekhnicheskikh nauk, rektorenant; POZEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITAYK, I.A., kandidat tekhnicheskikh nauk, redaktor; SLUZHOT'KAY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, rektor; SAMUNER, A.V., inzhener, redaktor; VASIL'YEV, V.P., redaktor izdatel'stva; SPERANSKAY, N.V., tekhnicheskaya redaktor

[Transformers for high-frequency heating] Transfomat' sy illia vysokochastotnogo napryava. Pod red. A.A.Pogol'sa. M.: Sov. Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 7 s. (Siblitotechka vysokochastotnika-tehnika, no.7) (MIMA 10:11)
(Induction heating) (Electric transformer)

SOV/137-58-10-20887

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 76 (USSR)

AUTHOR: Slukhotskiy, A.Ye.

TITLE: Through Heating of Forge Blanks of Rectangular Cross Section
(O skvoznom nagreve kuznechnykh zagotovok pryamougol'nogo
secheniya)

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga,
1957, pp 64-72

ABSTRACT: Equations and their derivations are advanced for determining the effective thickness of the active layer, the efficiency of the inductor, and the power expended in the induction heating (H) of sheets (S) and sandwiches. It is found that when S are heated, the interval of optimum frequencies is considerably broader than in the H of cylinders. Fluctuations in the electrical efficiency of the inductor within the interval of optimum frequencies is considerably weaker than in the H of cylinders. The results of experimental verification make it possible to conclude that the theory is in good agreement with experiment even when the ratio of width to thickness of the S is ~3.

Card 1/1 1. Induction heating--Mathematical analysis M.Ts.
 2. Metals--Heating

8(4)

SOV/112-59-4-7273

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 118 (USSR)

AUTHOR: Slukhotskiy, A. Ye., and Bamuner, A. V.

TITLE: Automatic Stabilization of Heating in Outfits Using Electron-Tube
Oscillators

PERIODICAL: V sb.: Prem. primeneniye tokov vysokoy chastoty. Riga, 1957,
pp 232-241

ABSTRACT: Two types of thermal-treatment stabilization are in use in induction-heating electron-tube outfits: stabilizing the oscillator operating conditions and stabilizing the surface temperature by a direct method. The first method includes maintaining constant the tube-heater and average anode voltages within $\pm 1.5\%$ by resonant stabilizers and by automatic control of firing angles of rectifier thyratrons and also by smoothing filters. The scheme, characteristics, and data of a SAN-56 anode-voltage stabilizer are presented. It maintains the anode voltage constant when load and supply voltage vary and

Card 1/2

SOV/112-59-4-7273

Automatic Stabilization of Heating in Outfits Using Electron-Tube Oscillators

permits a continuous adjustment of voltage. Functioning of the second-method stabilization scheme — a temperature pickup with an FEP NII TVCh photopyrometer — is described. The photopyrometer operates on a deviation of the work temperature from the prescribed temperature and changes the oscillator power by controlling its anode voltage; the latter is done by a phototube and an electron amplifier whose output includes controlled-magnetization reactors connected in the arms of a phase-shifting bridge. The bridge controls the phase of the voltage on the thyratron grids. The stabilization accuracy is $\pm 5^\circ$ within the 700-1,300°C range for supply voltage variation 180-260 v.

Bibliography: 2 items.

L.A.G.

Card 2/2

SOV/109-4-1-9/30

AUTHORS: Slukhotshikov, A.Ye., Vasil'yev A.S. and Martsinovich, V.M.

TITLE: Analysis of the Operation of a Series-type Thyratron
Converter (Analiz raboty posledovatel'nogo ionnogo
preobrazovatelya)PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1,
pp 63 - 69 (USSR)

ABSTRACT: The principles of the operation of a series-type converter is known (Ref 1). Two series converter circuits are shown in Figures 1 and 2. The circuit of Figure 1 employs two thyatrons but is asymmetrical. The circuit of Figure 2 is a push-pull arrangement. The operation of the two circuits is similar and can be analysed in the same manner, provided it is assumed that the capacitances C_1 and C_2 of the circuit of Figure 2 are each equal to half the total capacitance of the circuit of Figure 1. The operation of the circuit of Figure 2 is as follows. During the half-period, when the tube 1 is open, the capacitor C_2 is charged through the network RL_1 and the capacitor C_1 is charged through this network. During the succeeding

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SOV/109-4-1-9/30

Analysis of the Operation of a Series-type Thyratron Converter

half-period, the tube 2 is ignited and the capacitor C_2 is discharged, while C_1 is discharged through RL_2 . The condition necessary for the operation of the system is that the voltage at the choke, at the instant of the ignition of a tube, should be higher than the supply voltage E . The equivalent circuit of the converter of Figure 2 can be represented on a network consisting of L , RC and four switches (see Figure 3). During one of the half-periods, the switches 1-2 of Figure 3 are closed while the switches 3-4 are opened and the current flows in the direction indicated by the arrow in Figure 3. During the next half-period, the contacts 3-4 are closed and the contacts 1-2 are open so that the current flows in the opposite direction. The current in the choke has always the same direction. For the purpose of analysis, it is assumed that the voltage applied to the equivalent circuit is equal to half the source voltage. For each half-period of the supply voltage, the operation of the system can be described by:-

$$\text{Card2/4} \quad \frac{1}{2} E = L \frac{di}{dt} + iR + \frac{1}{C} \left(\int idt \right) \quad (1)$$

SCV/109-4-1-9/30

Analysis of the Operation of a Series-type Thyratron Converter

If the notation defined by Eq (2) is adopted, Eq (1) can be written in the form of Eq (5). If it is assumed that the network of Figure 3 operates in the oscillatory regime, the solution of Eq (5) is written as:

$$i^c = Be^{-\frac{R}{2L}t} \sin(\omega_0 t + \varphi) \quad (6)$$

where ω_0 is the natural frequency of the network, while the constants B and φ can be determined from the initial conditions. If it is assumed that $\omega_0/\omega = n'$, where ω is the frequency of the supply voltage, the initial conditions for the resistor current and for the voltage across the condenser can be written as Eqs (14) and (15), respectively. T in these equations denotes the period of the supply-voltage frequency. From these initial conditions, it follows that φ can be expressed by Eq (17), while B is given by Eq (19) where $k = RT/8L$. The effective normalised current or the voltage across the resistance is, therefore, expressed by Eq (24), while the

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SOV/109-4-1-9/30

Analysis of the Operation of a Series-type Thyratron Converter

maximum inverse voltage of the system is expressed by Eq (30). The so-called closing time of the system can be found from Eq (32), where u_L^+ denotes the voltage across

the choke, the closing time is defined as the interval between the inception of the switching and the instant when the voltage at the choke becomes equal to the supply voltage. Eq (32) can also be written as Eq (34). The above formulae were used to construct a number of graphs. These are shown in Figures 6, 7, 8. Figure 6 represents the voltage across the resistance as a function of k , Figure 7 shows the closing time characteristics in terms of k , while Figure 8 gives the values of the maximum inverse voltage as a function of k . Some experimental measurements were carried out and it was found that the discrepancies between the measured values and the results calculated by means of the formulae were less than 10%. There are 8 figures and 2 references, 1 of which is Soviet and 1 German.

SUBMITTED: April 15, 1957

Card4/4

S. Ushirokawa, et al., MITSUBISHI ELECTRIC CORPORATION

Operation of a self-excited electronic inverter. Trudy
MIRRA and others. 1976.

PHASE I BOOK EXPLOITATION

SOV/5693

Vasil'yev, Aleksandr Sergeyevich, and Aleksandr Yevgen'yevich
Slukhotskiy

Ionnnyye i elektronnyye invertry vysokoy chastoty (Gas-Filled and
Vacuum-Tube High Frequency Inverters) Moscow, Gosenergoizdat,
1961. 177 p. 6,500 copies printed.

Ed.: A. V. Bamuner; Tech. Ed.: Ye. M. Soboleva.

PURPOSE: This book is intended for scientific and technical personnel and for students in schools of higher education.

COVERAGE: The book gives an analysis of vacuum- and gas-filled tube inverters operating under stationary and transient conditions. The designing of basic units operating at elevated frequencies is examined and the circuits of vacuum- and gas-filled tube inverters used for the power supply of induction heating and ultrasound installations are reviewed. The book is largely based on the results of the authors' investigations at NII TVCh

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Gas-Filled and Vacuum-Tube (Cont.)

SOV/5693

(Nauchno-issledovatel'skiy institut tokov vysokoy chastoty imeni Prof. ., P. Vologdina -- Scientific Research Institute of High-Freq. Currents imeni Prof. V. P. Vologdin) and at the Leningradskiy elektrotekhnicheskiy institut imeni V. I. Ul'yanova (Lenina) Leningrad Electrotechnical Institute imeni V. I. Ul'yanov (Lenin). A. V. Bamuner and V. M. Martsinovich, Engineers, members of NII TVCh, participated in the work. Chs. I and II, Sec. 20 of Ch. IV and Sec. 21-24 of Ch. V were written by A. Ye. Slukhotzkiy; Ch. III, Sec. 17-19 of Ch. IV, and Sec. 25-27 of Ch. IV, and Sec. 25-27 of Ch. V by A. S. Vasil'yev. There are 19 references: 14 Soviet, 3 German, and 2 French.

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Ch. I. Fundamentals of the Theory of the Parallel Gas-Filled Tube Inverter	7
1. Principle of operation	7

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BAMUNER, A.V., inzh.; RUBCHINSKIY, A.V., kand.tekhn.nauk; SLUKHOTSKIY, A.Ye.,
kand.tekhn.nauk

Ionic frequency converter for covering 300 kw. power 1000 c.p.s.
Vest.elektroprom. 33 no.2:30-33 F '62. (MIRA 15:2)
(Electric current converters) (Frequency changers)

GOLOVIN, G.F., doktor tekhn. nauk, red.; DONSKOY, A.V., doktor tekhn. nauk, red.; SLUKHOTSKIY, A.Ye., kand. tekhn. nauk, red.; VOLOGDIN, V.S.V., dots., red.

[Industrial uses of high-frequency currents] Promyshlennoe primenenie tokov vysokoi chastoty. Moskva, Mashinostroenie 1964. 331 p. (MIRA 17:7)

L 14117-66 DWA(n)/EWT(1)
ACC NR: AR6001443

UR/0196/65/000/009/N006/N006
UDK 621.365.5.621.373.4

18
B

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 9N46

AUTHOR: Slukhotskiy, A.Ye.; Pushkin, V.Ya.

TITLE: A 60kw 70kc electronic inverter²⁵

CITED SOURCE: Tr. Vses. n.-i. in-ta tokov vysokoy chastoty, vyp. 5, 1964, 105-116

TOPIC TAGS: rotary inventor, electronic transformer, triode tube

TRANSLATION: A diagram and the comparative results of research on inverters with one and two anode plate inductors are given. The inverters are designed on the basis of an LPZ-67 generator substituting GU-22A tubes with GU-4A triodes, which permit higher dissipation of power on the screen and having a higher stability at 10 to 11 kv. The technical data and design of the new elements (systems of anode circuit, grid and anode choke, grid auto-transformer). The effect of the circuit coil capacitances on its efficiency is considered, and a theory on the processes in the grid circuit is given. For a network with chokes, connected between anodes of the tubes and with divided ac dc circuit, an 80% efficiency for the tubes at the anode has been obtained. 3 references. B. Zhukhovitskiy.

SUB CODE: 09

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SUKHOTSEV, A.Ye., doktor tekhn. nauk (Leningrad); RUSHKIN, V.Ya., inzh.
(Leningrad)

Analysis of the operation of an electronic converter with increased
frequency and parallel anode circuit with active load. Elektricheskvo
no.2:49-54 F '65. (MIRA 18;3)

PAVLOV, N.A., inzh.; SLUKHOTSKIY, A.Ye., doktor tekhn. nauk

Calculation of the distribution of temperatures along the cross section
of cylindrical steel objects during induction heating. Izv. vys. ucheb.
zav.; energ. 8 no.6;17-22 Je '65. (MIRA 18:7)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova (Lenina).
Predstavlena kafedroy slaktrotermicheskikh ustavovok.

SLUKHOV, F.S., inzhener.

Let us disseminate the practices of outstanding workers. Tekst.
prom. 14 no. 1:31 Ja '54.
(MLRA 7:2)
(Silk manufacture)

KORBANOVA, Z.N.; SLUKIN, A.D.; SHESTAKOVA, O.G.

Use of polystyrol resins in the mixture formula for
protective rubbers. Kauch.i rez. 21 no.11:51-52 N '62.
(MIRA 15:12)

1. Voronezhskiy shinnyy zavod.
(Resins, Synthetic) (Rubber coatings)

I 1189-63

EPF(c)/EWP(j)/EWT(m)/BDS ASD/AFFTC Pr.../Pc-4 RV/MJ

ACCESSION NR: AP3001425

S/0138/63/000/004/0001/0005

AUTHCR: Shatalov, V. P.; Gostev, M. M.; Krylova, I. A.; Artemov, V. M.;
Shestakova, O. G.; Korbanova, Z. N.; Slukin, A. D.; Sotnikov, I. F.; Torbinskiy,
A. N.TITLE: Low-temperature polymerized butadiene-styrene rubber with a carbon black-
oil fillerSOURCE: Kauchuk i rezina, no. 4, 1943, 1-5TOPIC TAGS: Polymerization, carbon black filler, oil filler, butadiene rubber,
styrene rubberABSTRACT: Studies were conducted on the preparation of stable dispersions of
various types of carbon black, with and without surface-active substances. The
latter included potassium rosinate, Leukanol, and ammonium caseinate. The dis-
persions were prepared in ball mills, in jet mills, and by means of a vibrator.
The kinetic and aggregate stability of the dispersions were determined. Potassium
rosinate and Leukanol produced dispersions which did not separate for several days.
The oil emulsion was prepared with the aid of stearic acid and triethanolamine.
The carbon black dispersion was mixed with the latex of butadiene-styrene rubber

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ACCESSION NR: AP3001425

and into it was introduced the oil emulsion. The coagulation of this mass was best achieved by pouring it into a 9% solution of sodium chloride containing 7% sulfuric acid at 40°C. It was found that the introduction of carbon black into the latex previous to coagulation had a favorable effect on the technological properties of the vulcanizates and permitted the processing of rubbers with a higher molecular weight. The KhAF brand of carbon black and the use of potassium rosinate as emulsifier produced vulcanized rubbers of superior strength and abrasive properties, i.e., a higher modulus of elasticity and with a better adhesion to the cord. Pasyunkov, N. V., Bondaryev, A. Ye., and Gergasevich, T. V. participated in the work. Orig. art. has: 3 tables.

ASSOCIATION: Voronezhskiy zavod sinteticheskogo kauchuka i Voronezhskiy shinnyy zavod (Voronezh Synthetic Rubber Plant and Voronezh Tire Plant)

SUBMITTED: OO

DATE ACQ: 30May63

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ACCESSION NR: AP3001429

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65
63

AUTHOR: Yukel'son, I. I.; Slukin, A. D.; Lutina, V. P.

TITLE: Compatibility of arylenealkyl polymers with natural and synthetic rubbers

SOURCE: Kauchuk i rezina, no. 4, 1963, 21-22

TOPIC TAGS: arylenealkyl polymer, natural rubber, synthetic rubber, plasticizer, carbochain polymer

ABSTRACT: The present work was undertaken for the purpose of locating plasticizers which would not impair the strength of rubbers. To this end arylenealkyl polymers were chosen which were of linear structure and in a liquid state, such as polyphenyleneethyl, polyethylphenyleneethyl, polychlorophenyleneethyl, and polyxylideneethyl. The compatibility of these with rubbers was determined by the kinetics of their swelling, which was estimated gravimetrically. The rubbers under test were the NK, the SKS-30 ARM, and the SKI-3. The kinetics of their compatibility with the oil PN-6 were taken as a standard. The compatibility of all arylenealkyl polymers, with the exception of the chloro-derivative, was far superior to that of the oil PN-6. The low polarity of the former and the high polarity of the chloro-derivative may have been responsible for the

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ACCESSION NR: AP3001429

difference. Rubbers SKI-3 and SKS-30 ARM showed the best compatibility with polyethylphenyleneethyl of molecular weight 1400 and with polychlorophenyleneethyl of molecular weight 1870, while natural rubber was most compatible with polyphenyleneethyl of molecular weight 1580. G. D. Alekseyeva participated in the determination of the decomposition temperatures of the polymers. Orig. art. has: 1 formula, 2 charts, and 1 table.

ASSOCIATION: Voronezhsky tehnologicheskiy institut (Voronezh Technological Institute)

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